

ARIZONA REGISTRAR OF CONTRACTORS

CR-67 LOW VOLTAGE COMMUNICATION SYSTEMS (RESIDENTIAL/COMMERCIAL)

SCOPE OF WORK

Low Voltage Communication Systems Scope of Work: This classification allows the licensee to build antenna towers on existing structures as required for the licensee to install, service or repair alarm systems, telephone systems, sound systems, intercommunication systems, public addressing systems, television or video systems, low voltage signaling devices, low voltage landscape lighting that does not exceed 91 volts, and master and program clocks (only low voltage wiring and needed equipment).

# of Questions	Minimum Passing Score	Time Allowed
60	70%	120 Minutes

CONTENT OUTLINE

Subject Area	# of Items
General Low Voltage Electrical Knowledge	15
Digital Communications Systems	10
Fire and Security Detection and Alarms	12
PA Systems	2
Grounding and Bonding	7
Conductors	14

REFERENCE LIST

To find reference materials, you may use the link provided or search for the material online via a search engine such as Google. You may also go to PSI's online store at www.psiolinestore.com.

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. **Except for Code books**, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

The following reference material is allowed in the examination center:

Code of Federal Regulations - 29 CFR Part 1926 (OSHA), with latest available amendments, U.S. Government Printing Office, (866) 512-1800 or <https://www.osha.gov/laws-regs/regulations/standardnumber/1926>

OR

Code of Federal Regulations - 29 CFR Part 1926 Selections by PSI, with latest available amendments, 3210 E Tropicana, Las Vegas, NV 89121, (800) 733-9267, www.psiolinestore.com

NFPA 70 - National Electrical Code, 2017, Association (NFPA), (800) 344-3555, www.nfpa.org

NFPA 72 - National Fire Alarm Code, 2016, National Fire Protection Association (NFPA), (800) 344-3555, www.nfpa.org

The following reference material is not allowed in the examination center:

Low Voltage Wiring: Security/Fire Alarm Systems, John E. Traister and Terry Kennedy, 2002, 3rd Edition.

Telecommunications Wiring, Clyde Herrick, 2001, 3rd Edition, Prentice-Hall PTR, (800) 382-3419, www.pearsonhighered.com

Understanding and Servicing Alarm Systems, 1999, 3rd Edition, Butterworth-Heinemann (Elsevier) (800) 545-2522, store.elsevier.com

Live Sound Reinforcement: A Comprehensive Guide to P.A. and Music Reinforcement Systems and Technology, Scott Hunter Stark, 2002, 2nd Edition

Data, Voice, and Video Cabling, Jim Hayes and Paul Rosenberg, 2009

Antenna Toolkit, Joe Carr, 2001, 2nd edition, Butterworth-Heinemann (Elsevier), store.elsevier.com

Practical Home Theater - A Guide to Video and Audio Systems, Mark Fleischmann, 2007, Quiet River Press, www.quietriverpress.com

Telecommunications Distribution Methods Manual, 2005 or 2014, BICSI, www.bicsi.org

Candidates are responsible for bringing their own references to the examination center. Reference materials may be highlighted, underlined, annotated and/or indexed prior to the examination session. However, references may not be written in during the examination session. Any candidate caught writing, highlighting, underlining and/or indexing in the references during the examination will be reported to the Arizona Registrar of Contractors. Furthermore, candidates are not permitted to bring in any additional papers (loose or attached) with their approved references. References may be tabbed/indexed with permanent tabs only. (permanent tabs are defined as tabs that would tear the page if removed). Temporary tabs, (defined as Post-It notes, or other tabs that may be removed without tearing the page) are not allowed and must be removed from the reference before the exam will begin. If you are downloading from the Internet, you may bring this reference into the testing center with you as long as it is bound. You can have it spiral bound or you may hole-punch it and put it in a binder.